No 6

149 North 9th

Passed
March 3d 1828

An
Inaugural Dissertation
on the
Hæmorrhoidal Disease,
for the
Degree of Doctor of Medicine
at the
University of Pennsylvania,
by
Robert Rodgers
of
Pennsylvania.

January 9th 1828.

A brief outline of the character,
causes, & Treatment of the
Hæmorhoidal disease.

Hæmorrhoidal Disease.

The hæmorrhoidal disease "consists, in a morbid state of the vessels of the rectum, and anus," attended generally with tumours, with or without a flow of blood; but occasionally, with a flow of blood without tumours.

Although this definition does not include all the phenomena of the disease; yet in my opinion, its most prominent characteristics are therein more briefly exhibited, than in any other which I have seen. —

This disease is of very frequent occurrence, and may be met with in every climate. It is more frequently found in females than males, especially in those who have borne children; owing, probably, to there being less tone in the vessels of these parts, and to the suppression of the menstrual fluid to which they are subject. Those of sedentary and indolent habits, are also peculiarly liable to its attacks.

It appears frequently, especially in the commencement of the disease, to be merely a topical affection, unconnected with any constitutional disturbance; in these cases, there are no symptoms precursory to the appearance of the tumours, and discharge of blood, which give intimation of the impen=

=ding attack; but in general, some premonitory signs may be observed, such as slight fever, nausea, vomiting, vertigo, stupor, pains in the back, and loins, a peculiar sensation of weight or tension, about the anus, which sometimes extends to the perineum. These symptoms sometimes continue several days, when a discharge of blood takes place, and the tumours make their appearance, which in general speedily puts an end to the preceding symptoms; but sometimes the attacks are frequently repeated before they make their appearance. As the discharge of blood and the tumours form, by far, the most prominent characteristics of the disease, it will perhaps be necessary for me to attend to them more particularly; and first of the discharge. Considerable difference of opinion exists, in the minds of Physicians, respecting the true source of this discharge; some contending that it has an arterial, others, a venous origin. Numerous arguments are adduced by each party in favour of its respective opinions, to examine all of which would be a useless waste of time, and as I do not consider it a matter of much practical importance, I shall pass by without noticing them: I beleive however, a majority are at present in favour of its being a venous discharge. The quantity discharged

varies

considerably. In the primary attacks it is generally very trifling, and shows itself particularly during the passage of faces, in the form of streaks on the external surface of the excrement; in these cases it would seem to proceed from the capillary vessels of the mucous coat of the rectum, and frequently without any solution of continuity in the part; it generally increases with each successive attack, and the quantity sometimes voided is truly alarming, insomuch that instances are related of persons dying, from the discharge alone. In these cases there is generally considerable inflammation, and the vessels of the part are in a state of preternatural excitement. If, after the phlogosis subsides, the hæmorrhage does not cease, or prove immediately fatal, debility necessarly ensues, which eventuates in a general derangement of the constitutional health. This discharge is, in some few instances, periodical, though it seldom observes with regularity the laws of periodicity; when however, this does take place, it is generally owing to the hæmorrhoidal vessels having assumed a vicarious action, in consequence of an obstruction or suppression of the menstrual or some other periodical discharge.

doubts are also entertained respecting the nature or object of this discharge, and its effects upon the system. some contend for its salutary, others for its injurious tendencies; but a consideration of these opinions will come more appropriately under the head of the treatment. Having now briefly examined, the most important things to be noticed concerning the discharge, we shall next pass to the consideration of its accompanying phenomenon, the tumours. These two accessory phenomena of the hæmorrhoidal disease are generally, though not uniformly, concomitant symptoms; for, we sometimes observe the appearance of tumours independently of any discharge of blood, and vice versa. These however form by far the most prominent features of the disease.

The precise manner in which these tumours are formed, is still a matter of controversy; whether they are the result of a rupture of some of the hæmorrhoidal vessels, and consequent effusion into the cellular membrane surrounding the anus; or merely a varicose distension of the hæmorrhoidal veins, is as yet, undetermined. Both opinions would, in certain cases, appear to me to be correct; that the latter opinion is sometimes true, I would infer

[illegible] circumstances [illegible] the
[illegible] in which [illegible] stimulus [illegible] the
[illegible] management [illegible] periodical; their [illegible] time is a
dark bluish [illegible] large [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
of the body; their being soft and yielding to the touch; and
from their size being subject diminished by pressure, but
speedily returning to their former dimensions on the removal
of the pressure; and when from absorption or any accid=
ental circumstance the coats of the vein become ruptured,
the hemorrhage is much more profuse, than it could
be were it the result of ulceration. But on [illegible]
we sometimes observe the upper surface, continuous [illegible]
at [illegible] time, and [illegible] [illegible] the skin in a loose,
flabby condition; having a brownish or pale red colour; being
of a pretty solid spongy [illegible] when cut into [illegible]
the appearance tolerably compact, "from which blood oozed, a=
nd the texture was much more relaxed." [illegible] [illegible] cat=
[illegible] appearances [illegible] [illegible] [illegible] is reason to believe in
[illegible] are the result of ulceration. The number of hem=
orrhoids varies greatly, sometimes there appears only a le=
[illegible] ring around the anus, at other times, many distinct

and prominent veins [illegible] distended, [illegible] painful [illegible] single as they are situated near to the sphincter ani muscle, and are compressed by it. The pain is sometimes so severe, that the patient can neither walk, ride, nor sit with any tolerable degree of ease, and the only situation which can, under such circumstances, afford him any respite from his sufferings, being the horizontal, with his limbs widely separated. The natural warmth of these parts has a tendency to keep up local heat; the sensations of weight, and tension are considerably increased by the obstruction which is presented to a free passage of blood through the hæmorrhoidal veins. The irritations produced by the combined influence of these causes frequently induces spasmodic contractions of the sphincter ani muscle, which give rise to most excruciating pain. These contractions are sometimes so violent as to produce strangulation of the tumours, from which mortification and sloughing result, and in this manner a radical cure is occasionally effected. In some cases where there exists high inflammation, adhesion takes place from the extravasation of coagulable lymph, which becoming organized, forms caruncular excresences, of various shapes, and sizes, [illegible] and [illegible] con[illegible] [illegible], [illegible] na-

[illegible] a reddish colour. As a secondary result of Œdema, there sometimes occur serous tumours around the anus, resembling moist in appearance the strictly speaking hæmorrhoidal tumours, but, however, easily to be distinguished from them, by their being more transparent, less vascular and compressible, and yielding, in many instances, only a few hours pain, after etc. [illegible] most met with in persons of a lymphatic [illegible]

Next, of the causes.

These may be arranged under two general heads, constitutional, and local. Under the former head may be mentioned intemperance, debauchery, sedentary habits, [illegible] predispositions, &c. Under the latter head may be mentioned costiveness, violent exercise on horseback, constipation of the bowels, and in short, whatever may tend to retard or prevent free passage of blood through the hæmorrhoidal veins. The situation and structure of the hæmorrhoidal veins would, in a particular manner, appear to favor the production of this complaint; for, independently of the circumstance of their being destitute of valves, the blood in them has to ascend contrary to its own gravity; and besides, they are devoid the assistance of

muscular action, a sense of [illegible], which exists not only in the [illegible] or [illegible] in almost every other part of the body; and [illegible] pressure, which is necessary to a free passage of blood through these vessels in opposite [illegible].

The [illegible] of certain medicinal agents, such as aloes, colocynth, [illegible], stimulating clysters and suppositories, are also the chief of producing this disease. These no [illegible] operate rather by producing irritations in the lower part of the intestinal canal, and thereby exciting an afflux of blood to the part, producing congestion, and [illegible] the same painful disease, with all its accompaniments [illegible]. The [illegible] of passions, strong mental [illegible] of a [illegible] nature, anger, fear &c. are said also to produce this affection. Fresh sands are said by Pinel, a distinguished writer on this subject, to operate by producing a [illegible] impression [illegible] the carotid [illegible] situated in the abdomen, and in [illegible] sympathetic communication with the [illegible], [illegible] [illegible]. [illegible] principal cause, is most [illegible] at the [illegible] in a state of increased [illegible] blood and [illegible] congestion [illegible] [illegible] in [illegible] digestion, biliary secretion, gastric irritation &c. The seat of the [illegible] disease is [illegible] the [illegible] of the ali-

viation and give rise to internal congestions of blood. The cutaneous vessels become almost exsanguious, and it is under such circumstances that we see rupture of the parietes of the heart or fatal congestions in some of the other viscera. Here an explosion of the hemorrhoidal flux offers wards off the impending danger.

Concerning the diagnosis, and prognosis of this disease nothing need be said. By an attentive observer, there is no disease with which it can be easily confounded. And very seldom is it necessarily fatal; although it may be consecutively so by inducing diseases much more pernicious to the constitution.

Having now briefly considered the general character of the disease, and the causes by which it may be produced we shall next pass to the more important part of our subject, viz.

Treatment.

And here in the first outset, we are met by the important question, is it proper for us to interfere, or even now to check this disease? It was contended by some of the ancients, particularly the celebrated Stahl and his followers, and indeed by some writers of more modern date, that this cannot be consistently with the health of the system: but this

opinion is now pretty generally exploded, and considered incorrect, except in certain cases where it appears as a vicarious discharge, or is dependent on some constitutional affection; in these instances, our attention must first be directed to the causes, and if it be owing to the suppression of some other discharge, we must endeavour to restore this, and then we may with all safety cure the hæmorrhoidal disease.

Except in the particular cases above mentioned, it would be the height of impropriety to permit so troublesome a complaint to continue its ravages upon the system, until it has impaired the constitutional health, and induced diseases more destructive than itself.

The first object which claims our attention in the treat. of the hæmorrhoidal disease, is the hæmorrhage.

The means by which this is to be suppressed, may be either general, or local. Where the hæmorrhage is considerable, the patient should be laid in a cool room, kept in a recumbent posture, with his hips elevated, and cold acidulated drinks freely administered. With a view to produce a determination of blood to some other quarter, as well as diminish the phlogistic diathesis of the system,

(if there be any present,) we may resort to venesection; but unless the hæmorrhage be profuse, and the system plethoric, it will not be necessary; with the same view cupping glasses may be applied to some remote part of the body. Styptic, and astringent injections, such as decoction of oak, or persimmon bark, should be freely administered. As a local application, the pulp of the persimmon will be found very serviceable. Should these means, all, however, in checking the hæmorrhage, we must next resort to compression; this may be effected, by means of a sponge tent introduced within the rectum. As a last resource, the actual cautery has, by some, been recommended: but this will scarcely ever be necessary, as we can generally succeed by more lenient measures. —

The next [illegible] attention is to be [illegible].

If [illegible] be attended by inflammation, the first thing to be enjoined is, absolute rest in a horizontal position, with the limbs widely separated, and the hips elevated. If there be any sympathetic fever, it will perhaps be necessary [illegible] a little blood from the general system, by venesection. [illegible]

[illegible] in taking away a [illegible] of blood from the [illegible] blood of the arm by means of cups, or leeches. [illegible]

A costive and relaxed state of the bowels is an object which we should generally endeavour to obtain in the [illegible] stage of the disease; but when the commencement of the disease, and the inflammation is high, it [illegible] necessary in order to relax the exhibition of emollients, as a short [illegible] or the passage of a strong [illegible] acid in [illegible] doses, will give rise to most [illegible] pain; but as soon as admissible [illegible] purgative should be used, such as [illegible] "remor tartar and sulphur &c. The painful spasms which I have alluded to, may be relieved by warm [illegible] fomentations, and gentle and continued pressure on the bowels, with Glauber's carpicum, or epsom salts from twenty, thirty, or forty drops to a table spoonful. These will generally have the effect of allaying irritation, and pain, as well as regulating the bowels. Numerous, indeed are the local applications, which have been recommended for these painful

swellings, to enumerate all of which would constitute a negation, I shall therefore only mention some of those which would appear to be most important.

Cataplasms, or poultices of bread and milk, or flaxseed moistened with rose water, and laudanum, for some gratefully applications, and proved serviceable in reducing the inflammation. An ointment composed of hog's lard, spermaceti, camphor and laudanum, is recommended by Professor Chapman, as an excellent application to excoriated tumors in the inflammatory state.

Cold applications are also very serviceable in determining heat from the part, and thus abating inflammatory action. Fomentations, or suppositories of opium, milk, or bitters, are also very efficacious in allaying irritation.

Injections of cold water are also very highly recommended.

Having by the means above detailed succeeded in subduing the inflammatory condition of these tumors, we may now resort to more eliminating measures.

As an internal remedy, Ward's paste in doses of three grains of a nutmeg several times per day is very important. Cubebs, also will be found to exert a very salutary

influence in this stage of the disease.

Of the local remedies in this stage of the disorder the unguentum gallæ, generally ranks highest. In the practice of my preceptor, however, an ointment composed of equal parts of unguentum gallæ, and unguentum hydrargyri has succeeded more effectually, than any other application. It may also be employed at an earlier stage of the disease than the unguentum gallæ alone. The ointment, and the water are also very efficient applications in the atonic state of haemorrhoidal tumours.

Compression also may here be very advantageously employed, which if the tumours be external, may be effected by compresses, and a T bandage; but if internal, by a wax candle, or piece of hard tallow. The tumours should in all cases, if practicable be returned within the rectum, and, may be done by anointing the finger with oil, and gently reducing them.

Though horse exercise when excessive, is a frequent cause of this disease, yet when moderately used, it proves a very important remedial agent; but this is altogether

inadmissible, except in the atonic stage.

Notwithstanding all our efforts, it frequently happens that we cannot, by our remedies, effect a permanent cure, all we can do being merely to palliate the more violent symptoms as they occur, and thus afford a temporary relief. — The physician, therefore, having exhausted all his resources in vain, the case must then devolve into the hands of the surgeon, from whom alone, in such cases, are we to effect a radical cure. This is to be effected by entirely removing the whole, or at least a considerable part of the tumours. For effecting this purpose two methods are in common use, the knife, and ligature. The latter is, at present, much preferred, at least in this country.

To the ingenuity, and skill of Professor Physick are we indebted for the discovery of the most convenient method of using the ligature. A discription of this instrument, and the manner of applying it, is, in this place, altogether unnecessary, as it is particularly described in most of our modern works on surgery. — It is proper to apply it to but one tumour

at a time, selecting the most prominent and painful; after it drops off, the part should be bathed with some cooling lotion, or a cold poultice applied, to promote the healing of the ulcer. Then the instrument may be again and again applied until a sufficient quantity be removed. — The method of using the ligature proposed by Mac.t Rousseau of Philadelphia, would appear, in certain cases, to answer very well; as where there are no prominent and distinct tumours; but merely a tumid ring around the anus; and where caruncular excresences have formed; for, in these cases, it is difficult to apply a single ligature. The actual cautery, and caustics were at one time much used for the purpose of removing hæmorrhoidal tumours, but they are now, I think, very justly abandoned.

(Finis)